Name: _____

HW#59: Preview Solving Radical Equations
Form A
Geometry
TP: _____ Due Date: Friday, January 31st, 2014

Failure to show work on all problems or use complete sentences will result in a LaSalle.

List the perfect squares of 1-15:

$2^2 = 4$

$3^2 = 9$

1) What is the smallest integer greater than $\sqrt{58}$?

a. 4
b. 7
c. 12
d. 15
e. 18

① Find the square root!
② what integer is greater?

2) Simplify: $\sqrt{150m^4n^3}$

$\sqrt{150} \cdot \sqrt{m^4} \cdot \sqrt{n^3}$

$\sqrt{\quad} \cdot \sqrt{\quad}$ mmmn nnn

3) Simplify: $\sqrt{54x^4y^5}$

$\sqrt{54}$ $\sqrt{x^4}$ $\sqrt{y^5}$

4) Simplify: $6\sqrt{192p^2r^3}$

$6 \cdot \sqrt{192} \cdot \sqrt{p^2} \cdot \sqrt{r^3}$

$6 \cdot \sqrt{\quad}\sqrt{\quad} \cdot \quad \cdot$

5) Simplify: $\sqrt{14x} \cdot \sqrt{2x}$

$\sqrt{14 \cdot 2}$ $\sqrt{x \cdot x}$

$\sqrt{\quad}$

STAY READY.

6) Simplify: $\frac{(x^2y^3)}{(2x^4y^3)^4}$

STRETCH IT OUT!
→ Multiply 4 by each exponent

$\frac{x^2 \cdot y^3}{(2 \cdot x^4 \cdot y^3)^4}$

7) Simplify: $-12m^{-20}n^0p^8$

① STRETCH!
② Negative exponents: Take reciprocal
③ Zero exponent = 1

Manipulate the following equations:

*USE opposite operations! Circle the variable.
① Start w/ +, −
② Then multiplication & division

8) Solve for W.

$P = 2W + 2L$

$-2L \quad -2L$

→ opposite operations + & −

$\frac{P - 2L}{2} = \frac{2W}{2}$

→ opposite operations • & ÷

$\frac{P - 2L}{2} = W$

→ Now we are solved for W!

9) Solve for a.

$v = u + at$

① Move u
② Move t

10) Solve for r: $A = \pi r^2$.

① Move π
② Move "squared"
↳ opposite is square root

Extra Credit: Solve for n.

$S = 180(n - 2)$

* Divide by 180 first!

STAY READY.